

Initial Site Selection Analysis Report

I-90 EB SCALE SITE - RAMSAY

STPX 90-4(73)214

UPN: 8797000



7/21/2016



Prepared by:
**ROBERT PECCIA &
ASSOCIATES**
Helena, Montana



INITIAL SITE SELECTION ANALYSIS REPORT

I-90 EB SCALE SITE - RAMSAY

STPX 90-4(73)214

UPN: 8797000

Prepared For:

MONTANA DEPARTMENT OF TRANSPORTATION

Preconstruction Bureau

Helena, Montana



Prepared By:

ROBERT PECCIA & ASSOCIATES

825 Custer Avenue

Helena, Montana 59604

(406) 447-5000

www.rpa-hln.com



July 21, 2016

INTRODUCTION

The Montana Department of Transportation (MDT) has initiated early project development activities for a new Motor Carrier Services (MCS) scale site for eastbound traffic on Interstate 90 (I-90). The I-90 EB Scale Site-Ramsay project—designated as STPX 90-4(73)214, CN 8797000—is intended to replace the scale site located at the Rocker Interchange (I-15 Exit 122/I-90 Exit 220) west of Butte which will be removed with a pending project. The existing scale site at the Rocker Interchange is undersized, operationally obsolete, and located in an area with little opportunity for expansion.

The possible locations for a replacement scale site in the Rocker area are limited. Previous study for the Rocker Interchange project has shown there is not sufficient area in the vicinity of the interchange to provide a replacement scale facility without causing significant operational concerns or the need to add auxiliary lanes and weaving sections to I-15. The Nissler Interchange is also too close to the Rocker Interchange for a scale site in that area. The terrain and conflicts with a newly installed eastbound truck climbing lane and bridges at the I-115 West Butte Interchange preclude development of a scale site east of the Rocker Interchange.

The new scale site cannot be located west of the Fairmont/Gregson Interchange (I-90 Exit 212) due to the potential for commercial trucks to use I-90 frontage roads in the Deer Lodge Valley, Montana Highway 1, and Secondary Highway 441 as a bypass route around the scale. For this reason, MDT is interested in developing the scale site adjacent to the eastbound lanes of I-90 between the Gregson/Fairmont and Ramsay (I-90 Exit 217) Interchanges.

The I-90 EB Scale Site-Ramsay project is being developed in two phases. The current Phase 1 work involves the development of a planning level site feasibility study with the intended outcome to select a site for the replacement MCS EB I-90 scale site. Future Phase 2 work will involve the project's subsequent preliminary engineering (PE) activities. The purpose of this report is to document the process and rationale to date used during Phase 1 activities to select a preferred location for a new MCS scale site for eastbound traffic on Interstate 90 (I-90) between the Ramsay and Gregson/Fairmont Interchanges.

INITIAL SITE REVIEW WORK

MDT selected a broad area of interest along eastbound I-90 between Reference Post (RP) 212.7 and RP 214.3 (east of the Gregson/Fairmont Interchange) as the focus of a preliminary evaluation for a new scale site. The initial study area (which comprised the study area for this project's Environmental Scan Report) included the existing presently traveled way (PTW) on I-90 and a 1,500-foot wide buffer area extending on either side of the highway from the center of the eastbound I-90 travel lanes and 1,500 feet west and east of RPs 213 and 214, respectively.

This generous boundary was judged to fully encompass the area potentially affected by the development of a new scale site and includes lands in parts of the following legally described areas of Silver Bow County:

- Township 3 North, Range 9 West, Sections 4, 5, 8, and 9
- Township 4 North, Range 9 West, Section 32

The initial study area is shown below in **Figure 1**.

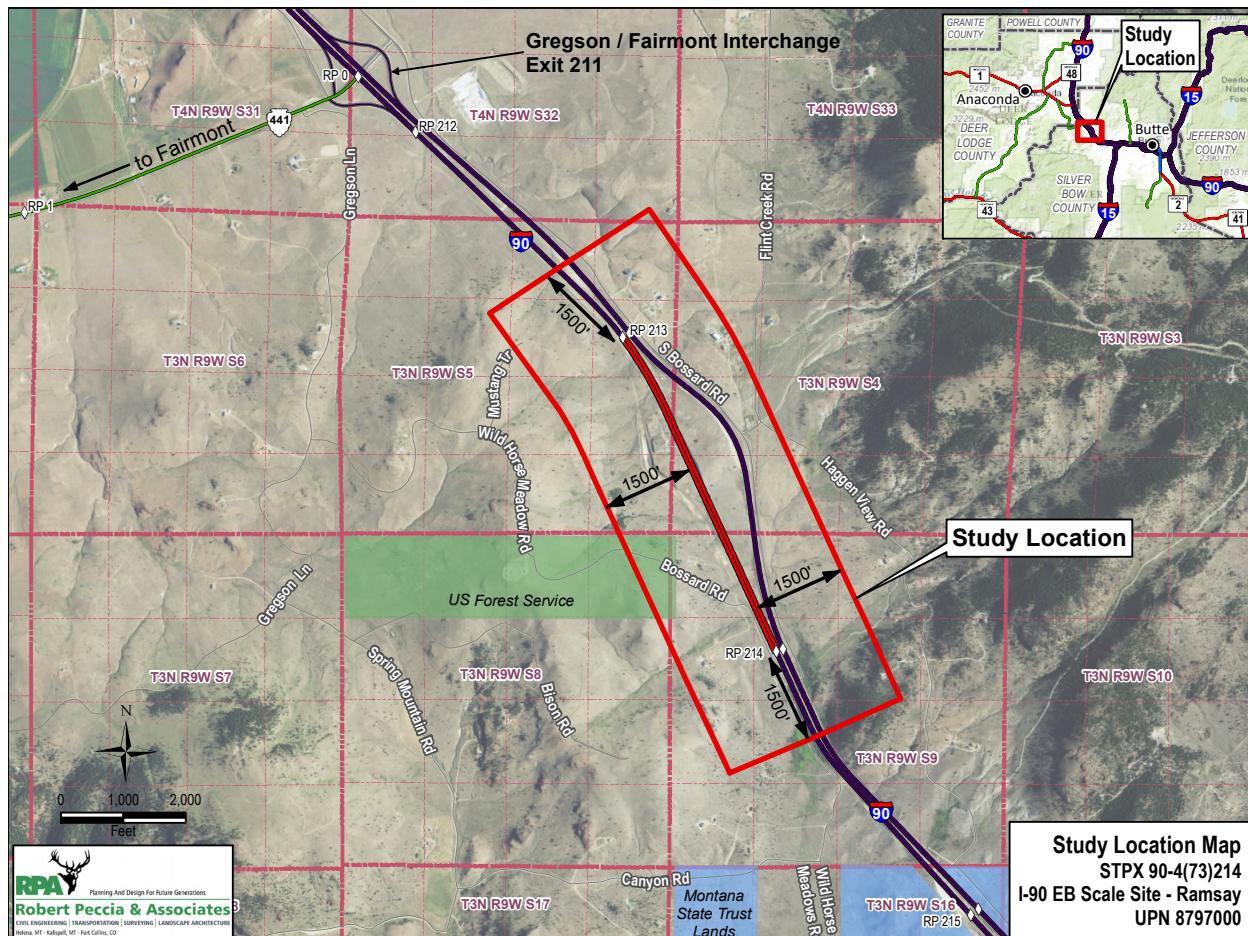


Figure 1: Initial Study Area

Environmental Scan. As part of the initial site review work, MDT's project consultant prepared an Environmental Scan Report for lands within the area of interest for a new scale site. The Environmental Scan Report is a planning-level evaluation that identifies environmental resources and conditions within the initial study area potentially affected by the development of a new scale site or that may influence the location and design of a new scale site. The Environmental Scan information was obtained from available reports, websites and other documents with the potential to yield relevant information about environmental resources in the initial study area. The Environmental Scan Report also helps

support future National Environmental Policy Act (NEPA) / Montana Environmental Policy Act (MEPA) analyses as MDT advances the project.

The draft Environmental Scan Report, completed in November 2015, did not identify any “fatal flaws” for establishing a new scale site in the area; however, several environmental conditions were noted that could influence the design and location of the new facility. Several notable environmental considerations for locating a new scale site in the initial study area are summarized below:

- The majority of the lands adjoining I-90 in the area have been subdivided into 20-acre or 40-acre tracts to provide residential building sites. Most residential development at this time exists on lands adjoining the westbound lanes of I-90.
- Butte-Silver-Bow County’s Silver Lake water line parallels the eastbound lanes of I-90 through the area.
- There are no named streams in the study area and but several ephemeral drainages exist along and cross I-90.
- An intermittent stream with associated freshwater emergent wetlands exist in a wet meadow area on both sides of I-90 southeast of RP 214. This area is also part of a delineated floodplain.

The Environmental Scan Report noted additional supporting studies including a geotechnical study, biological resources report, cultural resources inventory, and detailed noise study will need to be conducted for the selected scale site should MDT advance this project. Other Phase 2 PE work would include preparing a Traffic Report for the project.

Conceptual Scale Site Footprint. MDT’s consultant developed a preliminary “footprint” drawing for the new scale site to convey representative features (scale pad and associated building, truck parking area, ramp configuration, etc.) and illustrate minimum geometric and signing requirements for the new facility. The scale site footprint was established based on the West Butte MCS Scale Site (I-15 Exit 123.4) constructed by MDT in 2004 under project IM 15-2(74)122. Photos of the West Butte MCS Scale Site are shown below. The preliminary footprint for the scale site is shown in **Figure 2**.



Photos of the West Butte MCS Scale Site

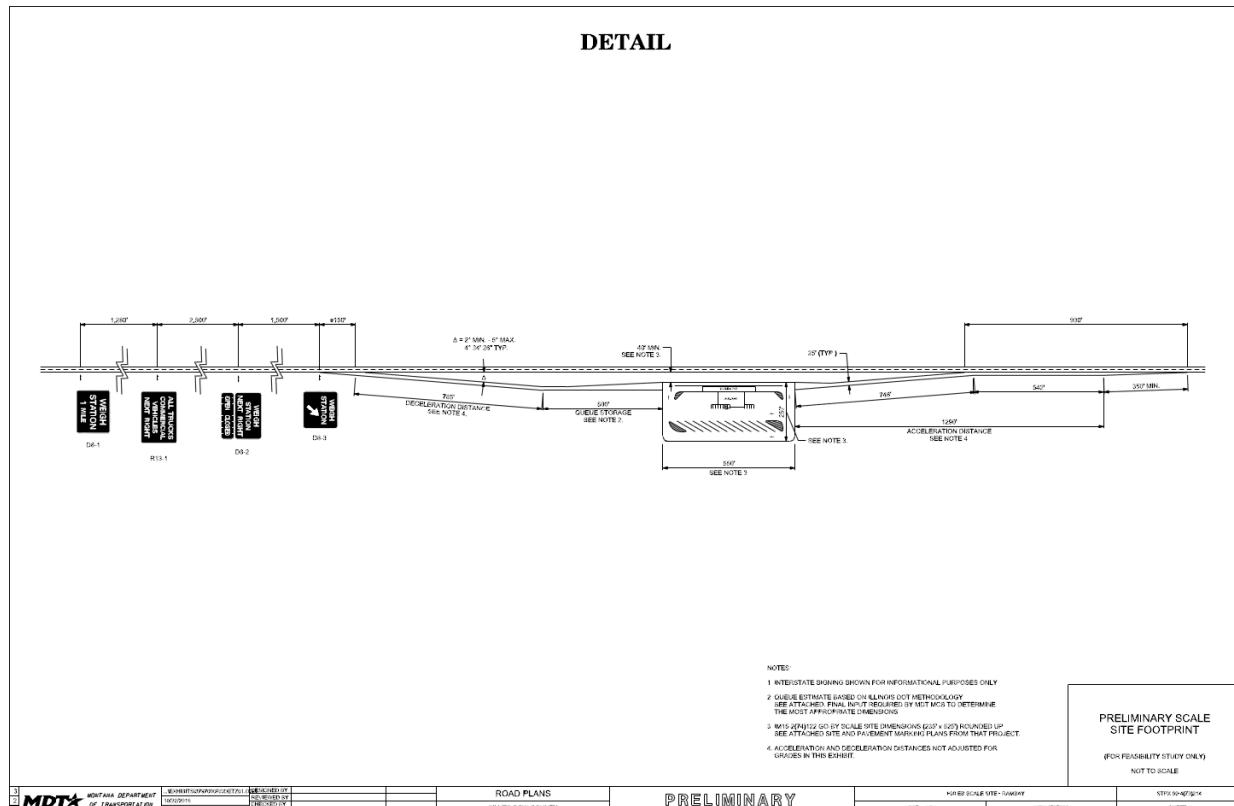


Figure 2: Preliminary MCS Scale Site Footprint

The conceptual scale site layout was developed based on design plans from the West Butte MCS Scale Site. This was then modified based on a calculated queue storage length of 500 feet for the traffic data provided by MDT. Ramp acceleration and deceleration distances were then further adjusted based on terrain estimations. Existing vertical, topographical, utility and cadastral information was derived from USGS digital elevation model data, as-built information in project I-IG-90-4(13)209, GIS and field review.

Public Informational Meeting. MDT held a public open house informational meeting on March 10, 2016 at the Ramsay School. The purpose of the meeting was to share information about the project, review preliminary findings from the draft Environmental Scan Report, and provide an opportunity for the public to comment on the proposal to develop a scale site in the area. In advance of the public meeting, MDT's consultant developed and distributed a newsletter with project information to the owners of properties located within the initial study area. In addition, MDT published a News Release and posted the draft Environmental Scan Report on the website developed for the project.

A variety of oral and written comments were received noting the following concerns:

- The area under consideration for the new scale site sees considerable use by elk.

- Lights from the new scale site will be obnoxious and shine into resident's homes.
- Truck traffic using the scale site and idling vehicles parked at the site will cause noise and air quality impacts for area residents.
- Gregson Hill (the area east of the Fairmont/Gregson Interchange on I-90) frequently sees poor winter driving conditions which contribute to crashes in the area.
- Move the site to the Anaconda area where lots of degraded areas have been re-claimed and nobody would be affected.
- Building a new scale site will devalue adjoining properties.
- Transients may frequent the scale site.

MDT prepared written responses to these and other topics of concern heard at the meeting or in comments submitted after the meeting. On May 25, 2016, these responses were mailed to area landowners and others who attended the public meeting or submitted comments after the meeting. The comment and response document is attached.

REFINED AREA OF INTEREST FOR THE SCALE SITE

After further study and reviewing public comments, MDT narrowed its focus in April 2016 to the Gregson Hill section of I-90 as a possible location for a new scale site. The area within the dashed blue line on **Figure 3** shows the refined area of interest.

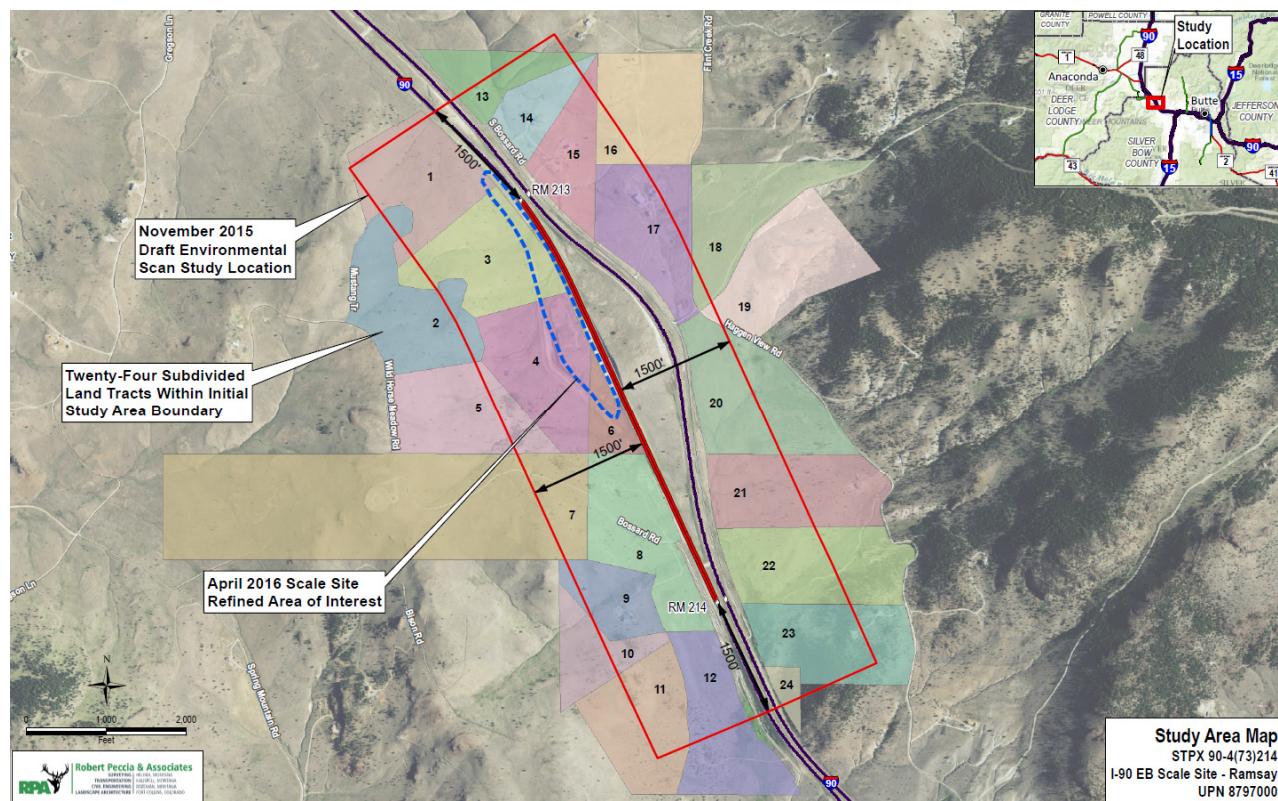


Figure 3: Refined Area of Interest for Scale Site

This area is preferred for the following reasons:

- Favorable Terrain. The eastbound lanes of I-90 in the refined area of interest include an increasing (uphill) grade to the top of Gregson Hill and a decreasing (downhill) grade east of the hillcrest. Ramps entering and leaving the scale site could be designed to use this terrain to help trucks using a scale site decelerate as they enter the facility and easily accelerate when leaving the scale site. This location would allow for shorter deceleration/acceleration lengths (translating into less site impacts) and help reduce the engine noise associated with decelerating and accelerating trucks.
- Few Adjoining Existing Residences. Lands adjoining the westbound lanes of I-90 in the study area have seen considerably more residential development than lands adjoining the eastbound lanes. Only five individual parcels adjoin the eastbound lanes of I-90 in the refined area of interest and the nearest existing structure (on Parcel 8) is located more than 0.25 miles from the top of Gregson Hill. The nearest residences along the westbound lanes of I-90 are located between 0.3 miles to more than 0.6 miles from the top of Gregson Hill. The alignment of the adjacent westbound I-90 travel lanes around Gregson Hill also helps separate these residences from the area of interest. The hill between the I-90 travel lanes and relatively long distance between the potential scale site and nearby residences should help minimize or avoid noise or air quality concerns.
- Terrain Offers Potential for Screening the Scale Site. The Gregson Hill offers an opportunity to develop a new scale site at a location where existing terrain and new grading could be used to help screen the site from some residences in the area.
- Avoids Conflicts with the Silver Lake Waterline. The Silver Lake Waterline, a 34-inch diameter steel pipe, parallels the eastbound lanes of I-90 through the area. Pipe transports 20.4 million gallons of water per day from the Anaconda area to the Butte-Silver Bow TIFID Industrial Park and Montana Resources Inc. mining operations in Butte. The route of the waterline diverges away from I-90 in the refined area of interest and conflicts with the line due to scale site development appear to be avoided in this area. Interruptions of any length to flows in the line would be costly. The waterline is much closer to I-90 in areas east and west of Gregson Hill.

POTENTIAL SCALE SITE LOCATIONS

MDT's consultant identified two location options within the refined area of interest for a new scale site. These options under consideration are identified below and shown in **Figures 4 and 5**:

- Option 1 - Scale Pad at Hill Crest**
- Option 2 - Scale Pad on Hill Upgrade**



Figure 4: Option 1 - Scale Pad at Hill Crest



Figure 5: Option 2 - Scale Pad on Hill Upgrade

The preliminary footprint for the scale site which established typical spatial requirements for the facility and was used along with aerial photography and existing design plans for I-90 to help identify the two potential locations for a scale site within the refined area of interest.

Preliminary layouts were then prepared for each option showing proposed ramp configurations, scale pad locations, and profile grades for ramps entering and leaving the scale sites. Preliminary layout drawings and plan and profile sheets for each option are attached.

A comparison of the key characteristics and the advantages/disadvantages of these options is provided in **Table 1**.

Table 1: Comparison of Scale Site Options

Characteristic	Option 1 Scale Pad on Hill Crest	Option 2 Scale Pad on Hill Upgrade
Overall Length of Ramps	0.56 miles	0.59 miles
Ramp Profile Grade (Scale Entry)	+3.2% (uphill)	+3.4% (uphill)
Ramp Profile Grade (Scale Exit)	-3.6% to -3.8% (downhill)	+1.6% to +3.2% (uphill)
Number of Adjoining Parcels Affected by Option	4 (No existing residences on parcels)	4 (No existing residences on parcels)
Limiting Environmental Considerations?	Based on the Environmental Scan information, there are no limiting environmental considerations for the development of a new scale site in the refined area of interest. Both location options affect only ephemeral drainages and would require a minor amount of vegetation and habitat loss. No wetlands are affected. Further evaluation of the preferred site is needed to determine potential effects to biological and cultural resources and to assess potential noise and air quality impacts.	
Advantages	<ul style="list-style-type: none"> • Shorter ramp lengths • Uphill ramp to help slow trucks entering and downhill ramp to help trucks accelerate when leaving the scale site • Few residences located near site • Location at top of hill and terrain between EB and WB lanes of I-90 helps shield scale site from view by residents of properties adjoining westbound lanes of I-90 • Opportunities exist for grading to help visually screen scale site and truck parking area and possibly reduce noise and lighting impacts 	<ul style="list-style-type: none"> • Potentially less earthwork than for Option 1 • Uphill ramp to help slow trucks entering the scale site • Few residences located near site
Disadvantages	<ul style="list-style-type: none"> • Likely requires more earthwork than Option 2 	<ul style="list-style-type: none"> • Length of required ramps • Uphill exit from scale site • Scale site would be more visible to residents of properties adjoining westbound lanes of I-90

SELECTION OF PREFERRED LOCATION FOR NEW SCALE SITE

Both scale site location options were forwarded to MDT for review and comments on April 18, 2016. A meeting between various MDT staff and MDT's consultant was held on May 18, 2016 to discuss the options and identify a preferred location for a new scale site. Those attending the meeting favored Option 1 for the location of the scale site. It was recommended that the preferred location (Option 1) be presented for comment at the next public meeting on the project.

In general, attendees felt locating the scale site at the top of Gregson Hill provided a good opportunity to use the existing upgrade to help slow trucks upon their entry into the scale site and allow them to more quickly accelerate as they exit downgrade from the scale site. Comments and concerns heard at the March 2016 public meeting were briefly revisited. All agreed that the terrain at the top of the hill could potentially help screen the scale site from view or help alleviate some concerns about lighting and noise impacts.

The group discussed the benefits of preparing visualization(s) for the next public meeting to illustrate to the public how the scale site might be developed at the preferred location and how the site may appear from various viewpoints. (Note - After the May 18, 2016 meeting, it was determined through consultation with MDT Consultant Design that visualizations would be produced after actual ground survey information is collected so the site can be accurately modeled and represented).

On May 25, 2016, a graphic showing the Preferred Location (Option 1) for the scale site (see **Figure 6** on the following page) and MDT's responses to public comments received from the March 2016 informational meeting were mailed to all area landowners and others who attended the public meeting. To date, no comments about locating a new scale site in the refined area of interest have been received although the owners of Parcel 8 (Kirby) have contacted MDT for more information about potential right-of-way needs from their property.

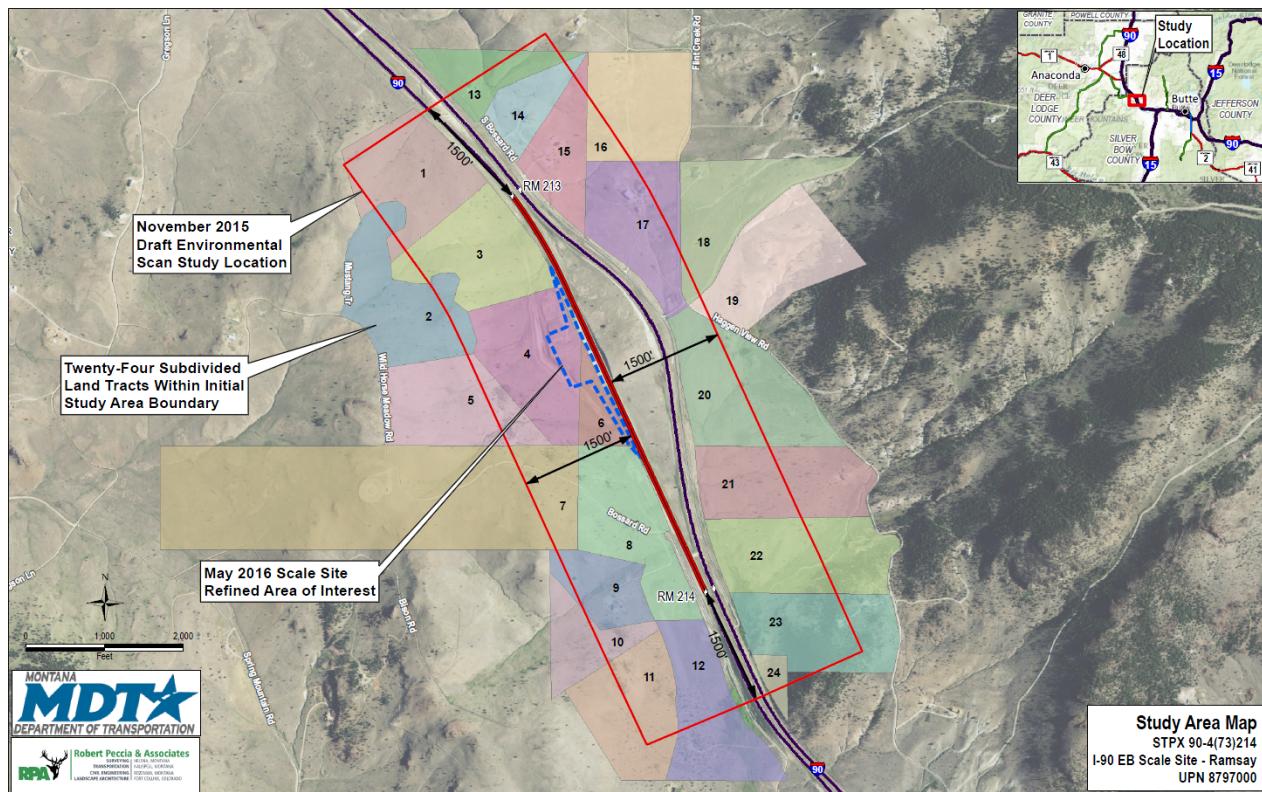


Figure 6: Preferred Location for New Scale Site (Option 1 - Scale Pad on Hill Crest)

ATTACHMENTS

- March 10, 2016 Public Informational Meeting Comments with Responses
- Feasibility Layouts of Options 1 and 2

I-90 EB Scale Site – Ramsay; STPX 90-4(73)214: UPN 8797000

March 10, 2016 Informational Meeting

Comments and Responses

SUBJECT/ COMMENTS HEARD	RESPONSE TO COMMENT
<p>WILDLIFE - ELK</p> <ul style="list-style-type: none">• The study area under consideration for the new scale site sees considerable use by elk.• The elk activity in the area this year may be more than in past years.• Seeing elk is unique and special for some area residents.	<p>Montana Department of Transportation (MDT) is aware of the presence of elk and that lands adjoining both sides of I-90 within the general area comprise important historic and current winter range for elk.</p> <p>Building a new scale site would require widening the highway right-of-way of I-90. The acquisition of this land (estimated to be about 10 acres) adjoining the highway for the scale site would require moving the existing interstate fencing to the backside of the selected site. This would expand the “footprint” of I-90 through the area, but it would not remove a significant amount of high quality habitat for elk or other wildlife species.</p> <p>Lands in the area have been subdivided for rural residences and many are currently vacant. However, when fully built-out, these future residential properties with their associated structures and human activities could also cause changes in habitat and use of the area by elk and other wildlife.</p> <p>More so, wildlife are likely accustomed to the continuous flow of traffic on I-90 through the full length of the study area. The high-speed traffic and noise generated by vehicles traveling on I-90 likely affects habitat use in the area. Traffic noise and activity on I-90 would continue to dominate even with the provision of a new scale site within the study area. Trucks will have to stop at the proposed scale site and overall travel speeds through the study area may be reduced helping to lower the potential for wildlife collisions on I-90 in the study area.</p> <p>If this project advances into the Design Phase, MDT will prepare a Biological Resource Report (BRR) which would include an evaluation of</p>

	<p>the baseline condition of and the project's potential effects on wildlife species and habitat and wildlife mitigation needs/opportunities in the project specific study area. Consultations with field biologists from federal and state agencies and a field survey of biological resources are activities typically conducted during the development of a BRR. In this instance, these activities are expected to provide important information on elk habitat and use of the project area by the species. This information would be used to evaluate the potential effects associated with constructing and operating a new scale site and identify mitigation measures, if needed.</p>
<p>SCALE SITE LIGHTING</p> <ul style="list-style-type: none"> Lights from the new scale site will be obnoxious and shine into resident's homes. 	<p>MDT's Traffic Engineering Manual indicates that lighting for permanent truck scale sites should illuminate weighing areas, parking areas, speed change lanes, and ramp and gore areas. The placement of lighting and the height of overhead lights would be determined during the design of the scale site.</p> <p>Light standards with overhead luminaires mounted on mast arms would be used at the scale sites. Luminaires have lenses and/or housings to direct the light down toward the area intended for illumination and eliminate stray side lighting glare and illumination of unnecessary areas away from the pavement. Required exterior lighting for the scale building can also be accomplished using horizontal cutoff fixtures to direct light downward and minimize undesirable glare.</p>
<p>NOISE</p> <ul style="list-style-type: none"> Truck traffic using the scale site and idling vehicles parked at the site will cause noise impacts for area residents. 	<p>It is important to recognize existing traffic on I-90 is the principal and dominant noise source in the study area. Vehicle speeds, volumes, and the mix of vehicles on I-90 all contribute to the noise levels in the area. The operation of a scale site would not change the number or type of trucks passing through the area. However, some noise benefits may be seen as overall travel speeds for a notable segment of trucks on this section of I-90 is reduced due to trucks slowing to enter the scale site and slowly accelerating to rejoin traffic upon exiting the site.</p> <p>Sound levels also drop off as the distance from the source increases. Sound from a stationary source (like an idling truck) decreases at 6 decibels for every doubling of distance from the source over hard</p>

surfaces like pavement. Traffic noise decreases at a lower rate (3 decibels to 4.5 decibels depending on the surface type) for every doubling of distance from the source. Given this relationship, traffic noise from I-90 would likely remain the dominant noise source in the area after the development of a new scale site.

Terrain and topography can also affect the way sound travels. Properties on hillsides overlooking a highway would be more exposed to noise than areas that are flat or below the elevation of the roadway. Opportunities exist to locate the new scale site in areas where local topography could beneficially be used to help reduce the noise exposure from the facility. As an example, if the site were located at the top of the Gregson Hill, the advantage of that site is that trucks entering the scale will be on the uphill grade. The grade, rather than jake brakes, will help slow down trucks as they enter the site. Upon leaving the scale site, trucks will proceed downhill which should reduce the noise associated with accelerating diesel engines.

If this project advances into the Design Phase, MDT is obligated to consider the potential for noise impacts associated with developing a scale site as part of its National Environmental Policy Act (NEPA) and Montana Environmental Policy Act (MEPA) compliance activities. As part of this effort, MDT will prepare a detailed noise analysis to help evaluate the potential noise effects of developing a new scale site. The analyses include measurements of ambient noise levels at noise receptors and modeling noise levels using existing and projected traffic volumes.

The purpose of the noise analysis is to determine whether noise levels *approach or substantially exceed* the FHWA's Noise Abatement Criteria. The Noise Abatement Criteria are specific noise levels for varying land use categories that are used to determine if and where noise impacts occur. Noise levels at rural homes near a new scale site and changes to noise levels due to scale site operations would be issues of interest for the noise analysis.

AIR QUALITY <ul style="list-style-type: none"> • Truck traffic using the scale site and idling vehicles parked at the site will cause air quality impacts. 	<p>The area being reviewed for a new scale site is considered to be in “attainment” for all criteria air pollutants (carbon monoxide, ozone, particulate matter, sulfur dioxide, oxides of nitrogen, and lead). The project would not increase the vehicular capacity or change the types of vehicles using this section of I-90. Slight increases in air pollutant emissions would be expected in the future due to expected traffic volume increases on I-90. These increases would happen with or without a new scale site in the area.</p> <p>Similar to noise, air pollutant levels would decrease as the distance from the source (I-90 traffic or idling vehicles at a scale site) increases. Other factors like local meteorological conditions (wind speed and direction) also influence pollutant concentrations and dispersion.</p> <p>The operation of a new scale site has the potential to create emissions of mobile source air toxics (MSATs). Several MSATs, including diesel particulate matter and diesel exhaust organic gases—are compounds posing risks to health. In recognition of this concern, the U.S. Environmental Protection Agency (EPA) has national control programs in place projected to significantly reduce MSAT emissions in the future due to cleaner fuels and engines.</p> <p>If this project advances into the Design Phase, MDT must consider the potential for air quality effects associated with developing a scale site as part of its NEPA and MEPA compliance activities. MDT will evaluate whether the project has the potential for MSAT effects and if an MSAT analysis is needed. If warranted, MDT would perform the appropriate level of analysis to identify MSAT effects.</p>
GREGSON HILL <ul style="list-style-type: none"> • Gregson Hill (the area east of the Fairmont/Gregson Interchange – Exit 211 on I-90) frequently sees poor winter driving conditions which contribute to crashes in the area. This should be a 	<p>If this project advances into the Design Phase, MDT will prepare a Traffic Report addressing a variety of issues including an analysis of crash data and dominant crash trends in the affected section of I-90.</p> <p>The Gregson Hill section of I-90 is considered a Level I roadway for winter maintenance purposes. The route is eligible to receive up to 19 hours per day coverage, typically between the hours of 5:00 AM and</p>

<p>consideration for the development of a new scale site in the area.</p>	<p>12:00 AM during a winter storm event. The primary objective is to keep the roadway open to traffic and provide an intermittent bare pavement surface in the main driving lane as soon as possible given available staffing and equipment.</p> <p>Should a scale site be developed, officers from MDT's Motor Carrier Services (MCS) would staff the facility. MCS personnel would be available to alert MDT maintenance personnel to adverse winter road conditions in the area, and potentially be first responders to weather and traffic-related crashes in the area.</p>
<ul style="list-style-type: none"> If a scale was built near the crest of the Gregson Hill, MDT should consider adding another lane so trucks intending to use the site can get out of the traffic stream. 	<p>If this project advances into the Design Phase, MDT will prepare a Traffic Report identifying geometric revisions necessary to accommodate eastbound through traffic and truck traffic movements into and out of the new scale site.</p>
<p>CONSIDER ANOTHER LOCATION FOR THE SITE</p> <ul style="list-style-type: none"> This is a nice little valley why put the facility here? Move the site to the Anaconda area where lots of degraded areas have been reclaimed and nobody would be affected. 	<p>Permanent scale sites serve as the backbone of Montana's truck size and weight enforcement program. Weight restrictions on commercial trucks protect Montana's highways and help ensure the safety of the traveling public. The primary purpose of these scale sites is to enforce truck weight regulations, in order to protect the infrastructure from excessive wear and tear caused by overweight trucks. Overweight trucks are estimated to cause hundreds of millions of dollars in damage to the nation's roadways each year which is an additional burden to taxpayers. MCS officers check commercial vehicles for proper licenses, size and weight permits, and they inspect vehicles to ensure they meet all safety regulations at the same time they are weighed.</p> <p>Scale sites intercept commercial vehicles entering or passing through the state on major highways. Montana's permanent scale sites have been strategically located so commercial vehicles don't avoid weighing by traveling on bypass routes. If trucks avoid scale sites, the consequences are notable. Weight requirements could be violated without detection measures, resulting in pavement and structural damage to our roadways. Safety requirements could also be violated without detection, resulting in crashes or injuries. Additionally,</p>

	<p>revenue to the state from tax assessment based on the weight of transported goods could be lost. These effects are heightened by the fact that the routes used to bypass scale sites are usually lower-class highways, with less capability to handle overweight trucks and truck traffic in a safe manner.</p> <p>The proposed scale site is intended to replace the existing scale site for eastbound traffic located at the Rocker Interchange I-15 Exit 122/I-90 Exit 220 which will be removed with a pending project. There is not sufficient area in the vicinity of the Rocker Interchange to provide a replacement facility without causing significant operational concerns or the need to add auxiliary lanes and weaving sections to I-15.</p> <p>The possible locations for the new scale site in the area are limited. The Nissler Interchange is too close to the Rocker Interchange for a scale in that area. The terrain and conflicts with a newly installed eastbound truck climbing lane and bridges at the I-115 West Butte Interchange preclude development of a scale site east of the Rocker Interchange. The new scale site cannot be located west of the Fairmont/Gregson Interchange due to the potential for commercial trucks to use I-90 Frontage Roads in the Deer Lodge Valley, Montana Highway 1, and Secondary Highway 441 as a bypass route around the scale.</p> <p>The area between the Ramsay Interchange and the Fairmont/Gregson Interchange contains terrain that could be used to help trucks using a scale site to decelerate into the facility and easily accelerate when leaving the scale.</p>
<p>DEVALUATION OF PROPERTY</p> <ul style="list-style-type: none"> • Building a new scale site in this area will devalue adjoining property. 	<p>MDT is not aware of any studies or research specific to the effects of building a scale site in a rural area on residential property values. Most research on the topic has focused on the effects of new roadway/freeway development on residential property values in urbanized areas. Studies have shown that new roads and the associated access and mobility changes can have both positive and negative effects on property values. In general, the research has shown that highway noise, air pollution, and safety hazards associated with increased traffic (particularly heavy</p>

	<p>truck traffic) are factors that may be detrimental to property values when a new highway is constructed in a corridor. More so, research also suggests that detrimental effects on property values decrease as the distance from the roadway increases.</p> <p>With respect to this proposed scale site project, notable residential subdivision activity occurred well after I-90 was built through the area in 1967 and much of the residential development seen in the study area also occurred after I-90 was already in place. This suggests property values have already responded to conditions associated with the presence of I-90 in the area.</p> <p>Adding a scale site would not change traffic volumes or the mix of traffic seen on I-90 in the area. If the project advances, MDT will conduct work to determine the potential environmental effects of building a new scale site at the selected location.</p>
<p>TRANSIENTS</p> <ul style="list-style-type: none"> • Transients may frequent the scale site. 	<p>MCS officers who would staff the facility are law enforcement officers. They would not allow transients to congregate at the facility. The site would be designed with exit and entry ramps to I-90 only, and no new connections to local roads in the area will be created. The proposed scale site will not be a “travel plaza.” The facility will only be used by the MCS to monitor truck traffic.</p> <p>MDT has no intention to encourage or accommodate the development of commercial services on lands adjoining a new scale site since I-90 is a full access controlled roadway.</p>
<p>OTHER ISSUES</p> <ul style="list-style-type: none"> • Covenants in the Flint Creek Subdivision in the area prohibit bright lights or loud noises. 	<p>Building a new scale site would require the acquisition of about 10 acres of land adjoining the highway. The land would be acquired from affected property owners and used to build the scale site and associated features. The existing right-of-way for I-90 would be adjusted to accommodate the scale site and entry and exit ramps for the facility. This is not unlike adjusting the highway right-of-way to add an additional lane. The right-of-way for I-90 is intended to be used for highway-related purposes, which includes features like a new scale site.</p>

	<p>The Flint Creek Subdivision adjoins the westbound lanes of I-90 in the initial study area for a new scale site. Covenants apply only to lands within the subdivision. Widening of the highway right-of-way to accommodate the proposed scale site would not be part of any subdivision. Instead, it would be considered a boundary modification to the subdivision and an adjustment to the right-of-way for I-90.</p>
<ul style="list-style-type: none"> A couple who live in the area said their wells and a neighbor's well had arsenic levels of concern in them. 	<p>If this project advances into the Design Phase and well development is proposed for the selected site, MDT would investigate groundwater conditions at the selected site and make a determination about drilling a well.</p>

OPTION 1

SCALE PAD AT HILL CREST -- SITE OVERVIEW

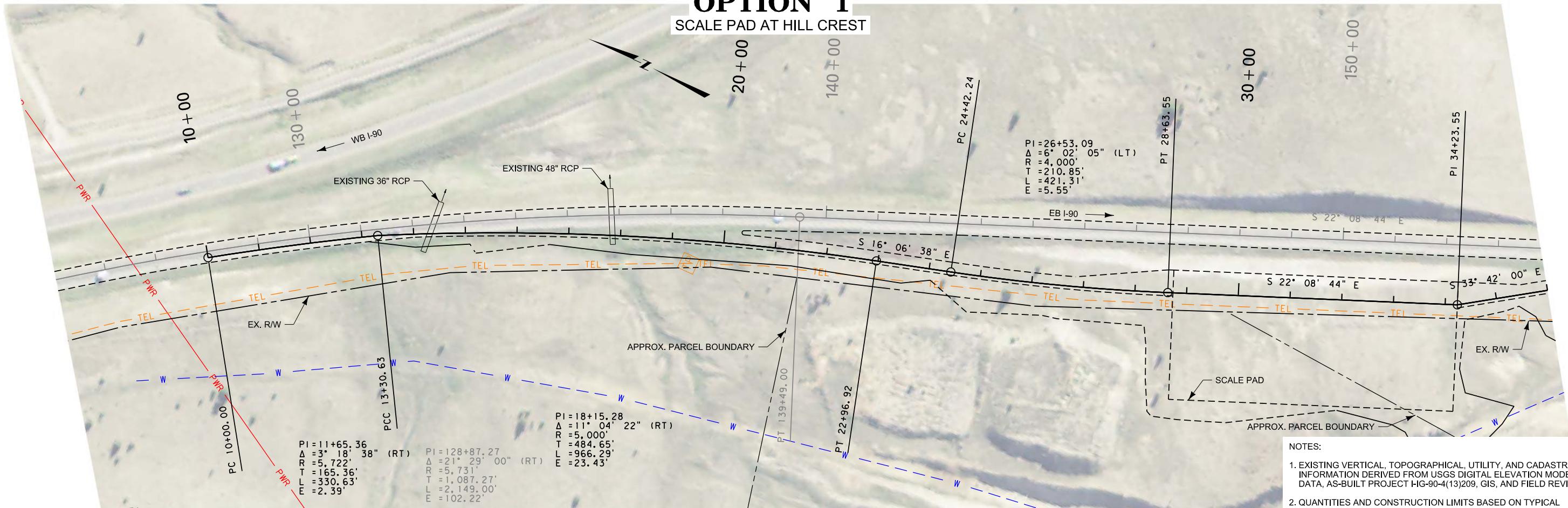


NOTES:

1. EXISTING VERTICAL, TOPOGRAPHICAL, UTILITY, AND CADASTRAL INFORMATION DERIVED FROM USGS DIGITAL ELEVATION MODEL DATA, AS-BUILT PROJECT I-IG-90-4(13)209, GIS, AND FIELD REVIEW.
2. QUANTITIES AND CONSTRUCTION LIMITS BASED ON TYPICAL SECTION CRITERIA FOR A NHS INTERSTATE ROUTE.

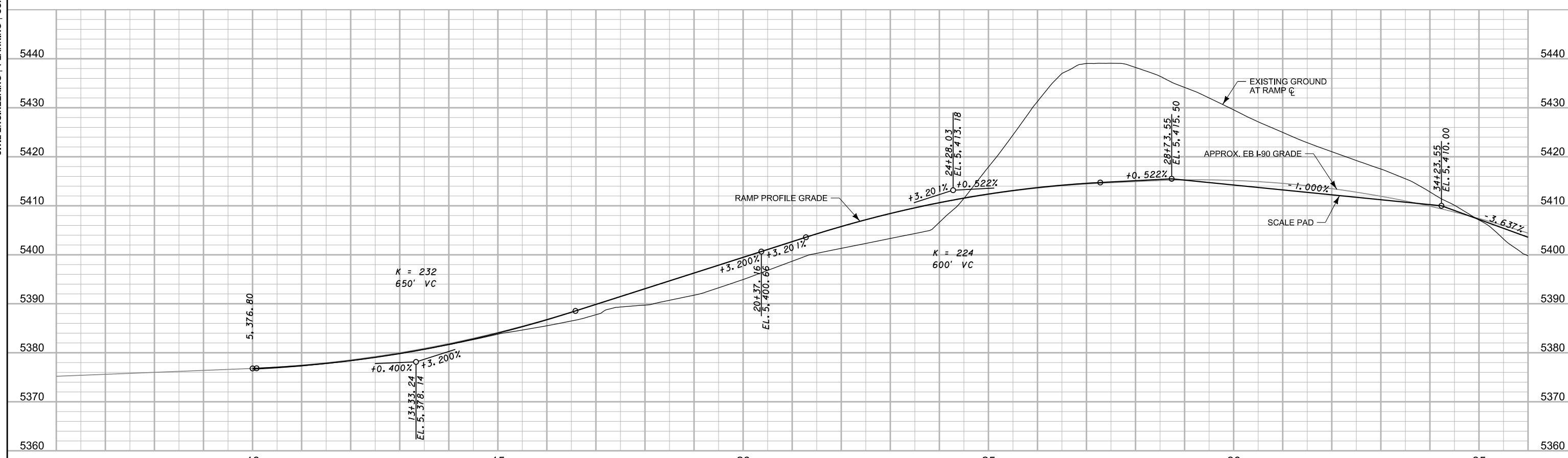
OPTION 1

SCALE PAD AT HILL CREST



NOTES:

1. EXISTING VERTICAL, TOPOGRAPHICAL, UTILITY, AND CADASTRAL INFORMATION DERIVED FROM USGS DIGITAL ELEVATION MODEL DATA, AS-BUILT PROJECT I-IG-90-4(13)209, GIS, AND FIELD REVIEW.
2. QUANTITIES AND CONSTRUCTION LIMITS BASED ON TYPICAL SECTION CRITERIA FOR A NHS INTERSTATE POLITE.



OPTION 2

SCALE PAD ON HILL UPGRADE -- SITE OVERVIEW

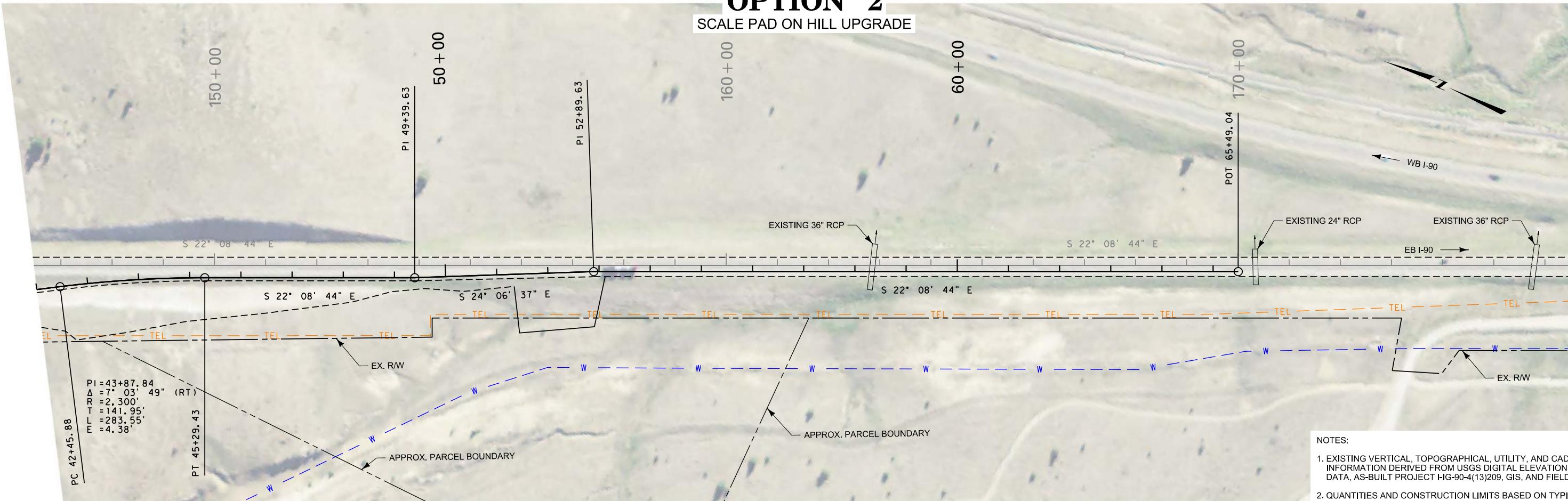


NOTES:

1. EXISTING VERTICAL, TOPOGRAPHICAL, UTILITY, AND CADASTRAL INFORMATION DERIVED FROM USGS DIGITAL ELEVATION MODEL DATA, AS-BUILT PROJECT I-IG-90-4(13)209, GIS, AND FIELD REVIEW.
2. QUANTITIES AND CONSTRUCTION LIMITS BASED ON TYPICAL SECTION CRITERIA FOR A NHS INTERSTATE ROUTE.

OPTION 2

SCALE PAD ON HILL UPGRADE



NOTES:

1. EXISTING VERTICAL, TOPOGRAPHICAL, UTILITY, AND CADASTRAL INFORMATION DERIVED FROM USGS DIGITAL ELEVATION MODEL DATA, AS-BUILT PROJECT I-HG-90-4(13)209, GIS, AND FIELD REVIEW.
2. QUANTITIES AND CONSTRUCTION LIMITS BASED ON TYPICAL SECTION CRITERIA FOR A NHS INTERSTATE ROUTE.

